

# Motor Circuit Analysis



MCE testing can help reduce unforeseen failures such as:

- 1 Failures of insulation between the winding and the core
- 2 Winding failure Phase to Phase
- 3 Failure in a stator winding at the connection
- 4 Winding Failure to ground
- 5 Failure of conductors leading to the motor
- 6 Winding imperfections with AC and DC Motors

A simple test to let you know what is going on inside your motor without removing it or disassembly. Testing can be performed on AC or DC Motors, including wound rotor and Synchronous. Readings can normally be taken at the controls without disconnecting leads at the motor.

		MCE Testing		SPINA ELECTRIC CO.			HARRISON ELECTRIC							
		Red - Immediate Action Required		Yellow - Schedule a repair soon		Blue - Need to monitor closely		Green - No immediate issues						
		Motor Name	Date Tested	Capacitance	Resistance			Inductance			Megger Reading	PI		
					1 to 2	2 to 3	3 to 1	1 to 2	2 to 3	3 to 1				
EAF	11	Baghouse East Main Exhaust Fan	1/12/2022	160,800	0.1284	0.1280	0.1244	2.00%	5.430	5.550	5.015	5.94%	1,600	6.020
	12	Baghouse South Main Exhaust Fan	1/12/2022	176,500	0.1177	0.1174	0.1173	0.20%	4.745	4.760	4.750	0.18%	478	3.940
	13	Baghouse North Main Exhaust Fan	1/12/2022	176,200	0.1216	0.1218	0.1216	0.11%	5.270	5.260	5.270	0.13%	720	3.312
	14	(EAF) Hydraulic Pump #1	1/12/2022	23,600	0.0810	0.0810	0.0805	0.41%	1.450	1.450	1.450	0%	8,800	1.684
EAF Hydraulic Pumps	15	(EAF) Hydraulic Pump #2	1/12/2022	24,100	0.0791	0.0791	0.0791	0%	1.425	1.425	1.420	0.23%	2.8	1.146
	16	(EAF) Hydraulic Pump #3	1/12/2022	22,500	0.0909	0.0906	0.0907	0.18%	4.320	4.175	4.865	9.24%	8,400	1.604

Clear and readable reports. Color Coded to take the guesswork out of preventative maintenance.



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